

**Notice of Allowability**

Application No.

09/834,623

Applicant(s)

SUZUKI ET AL.

Examiner

James A. Thompson

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 27 June 2006.
2. ☒ The allowed claim(s) is/are 3-18.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_

7. ☐ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other \_\_\_\_\_

*David Moore*  
**DAVID MOORE**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments, see pages 8-11, filed 27 June 2006, with respect to the rejections under 35 USC §103(a) have been fully considered and are persuasive. The rejections under 35 USC §103(a) listed in items 3-5 of the previous office action, dated 24 February 2006 and mailed 03 March 2006, have been withdrawn.

***Allowable Subject Matter***

2. Claims 3-18 are allowed.

The following is an examiner's statement of reasons for allowance:

Both the image area map creating unit recited in the apparatus of claim 3 and the eliminating step of the method of claim 18 perform the process comprising:

"plotting the centers-of-gravity of the recognized halftone dots in a plot area ensured in advance,

"determining a shape and a size of masks to serve as search areas based upon an input resolution of the binary image,

"arranging the masks to include a center-of-gravity of a target halftone dot,

"counting a number of centers-of-gravity of the halftone dots for each of the arranged masks,

"determining a high possibility that noise and/or dust on the binary image may be erroneously recognized as halftone dots, if the number of the centers-of-gravity of the halftone dots is equal to or smaller than a threshold value,

"eliminating information about the centers-of-gravity of erroneously recognized halftone dots from the list and the plot area, and

"creating a halftone dot image area map according to the halftone dot information list from which the erroneously recognized halftone dot information has been eliminated".

While some of the individual steps of the process are found in the prior art, the total process is not found in the prior art such that the recited process is anticipated and/or obvious to one of ordinary skill in the art at the time of the invention. Particularly, the combined steps of counting, determining a high possibility, and eliminating as presently recited are not found in the prior art of record, nor has Examiner been able to discover additional prior art which teaches the recited process.

The closest prior art is the previously applied prior art of record, namely Yamashita (US Patent 5,555,362), Lee (US Patent 6,160,913), Ohsawa (US Patent 4,876,610), and Wada (US Patent 5,949,922). However, neither Yamashita, Lee, Ohsawa nor Wada teach the combined steps of counting, determining a high possibility, and eliminating.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Thompson whose telephone number is 571-272-7441. The examiner can normally be reached on 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

James A. Thompson  
Examiner  
Technology Division 2625

  
21 August 2006



**DAVID MOORE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600**